MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2019 / 2020

PCA 0084 – COMPUTER SYSTEM AND WEB DESIGN

(Foundation in Business)

3 MARCH 2020
9:00am – 11:00am
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 3 pages (excluding the cover page) with 5 questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

QUESTION 1 [10 Marks]

The following questions are on Introduction to Computers, Input and Output.

a. Explain what is a computer system?

(3 marks)

b. Briefly discuss **THREE (3)** applications or systems that use biometric input for authentication process.

(3 marks)

c. Explain what is audio output. Give **TWO (2)** examples of audio output device.

(2 marks)

d. Name **FOUR (4)** types of monitors for computers that we discussed in class.

(2 marks)

QUESTION 2 [10 Marks]

The following questions are on Secondary Storage.

a. Computers already have a primary storage to hold data during processing, however discuss **TWO (2)** reasons why we need to have a secondary storage.

(2 marks)

b. Define the following terms.
   i. Capacity
   ii. Access time

(2 marks)

The following questions are on the Components of the System Unit.

c. Which part of the computer component is called "the brain" of the computer? Briefly discuss the **TWO (2)** important parts that make-up this component.

(3 marks)

d. The system unit contains two types of memory which are volatile memory and nonvolatile memory. Answer the following questions.
   i. What happen to the contents stored in both memories when power is turned off?

(2 marks)

   ii. Give **ONE (1)** example of memory for each memory type.

(1 mark)

Continued ...

QUESTION 3 [10 Marks]

The following questions are on Operating Systems and Utility Programs.

a. One of the functions of the operating system is memory management which is called virtual memory. What is virtual memory and its use?

(2 marks)

b. Windows 10 and Windows Server 2019 are two different types of operating system even though they are owned by the same company. Explain their difference in terms of their usage.

(2 marks)

c. List **SIX (6)** utility programs that you commonly use when using a computer.

(3 marks)

The following questions are on Application Software.

d. Explain the characteristics of the following software.
   i. Packaged software
   ii. Custom software
   iii. Shareware

(3 marks)

QUESTION 4 [10 Marks]

The following questions are on Graphics and Multimedia.

a. To listen music or to watch movie on your mobile device, you can either *stream* it or *download* it. Explain the terms of streaming and downloading.

(2 marks)

b. Give **THREE (3)** reasons why would you want to save an image as GIF format rather than JPEG format.

(3 marks)

The following questions are on Communications and Network.

c. Explain what is LAN.

(2 marks)

d. What is the difference between WLAN and LAN?

(1 mark)

e. The layout pattern of the interconnections between computers in a network is called network topology and it can be illustrated by showing the nodes and its connections using cables. Sketch and briefly explain its characteristic of **TWO (2)** network topologies we discussed in class.

(2 marks)

Continued ...

QUESTION 5 [10 Marks]

The following questions are on Database Management and Information System.

a. Explain the function of the following tools provided in the Database Management System (DBMS).
   i. Query
   ii. Form

(2 marks)

b. In relational databases, a table is where all the data is stored. Let's say you want to collect your friends' data for personal use. Create a table with the following fields: *Name, Course, E-mail, Campus*. Then, add **TWO (2)** records of your friends to the table. You may use dummy data for the records.

(3 marks)

The following questions are on Computer Security, Ethics and Safety.

c. The left column of **Table 1** is the list of computer threats or risks associated with computer security risks. Match the following threats to their descriptions in the right column by writing the term in the blanks provided. An example is shown below.

Table 1

Threats	Descriptions
Virus	A. _*Virus*__ A program spreads itself into other executable code or documents on the user's PC to ensure that the victim's computer will never be able to operate properly.
Hacking	B. _____ A program that can copy itself from one computer to another, without human interaction to use up the computer hard disk space.
Spamming	C. _____ Disguising as a trustworthy person or business to steal personal information through fraudulent email or instant messages.
Spoofing	D. ____ A program designed to remotely execute files and change system configurations on the host machine.
Phishing	E. ____ A technique to make their network or Internet transmission appear legitimate.
Rootkit	F. ____ A technique to gain unauthorized access to systems or networks in order to commit crimes.
Worm	G. ____ To use messaging system to send an unsolicited e-mail message or newsgroup posting.

(3 marks)

d. Explain what is computer ethics and what is the main concern about information that is downloaded from the Internet?

(2 marks)

End of Paper